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ABSTRACT

This volume is a survey of more than 125 Australian apprenticeship and traineeship references from 1985-99. Each item identifies author/editor/organization, date, title, organization and place of publication or development. A "key" provides a descriptive phrase relating to the reference type, such as an industry-body paper on training delivery (to special groups); industry view on training system; academic paper on industry training and training delivery; or official report on training funding, policy, and system. Each reference is summarized for its origin, key topics, and key issues in the contemporary setting. (YLB)

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NCVER Australian Apprenticeships

Review of the Australian apprenticeship and traineeship literature

References and their key issues

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Background

The National Centre for Vocational Education and Research (NCVER) is reviewing developments and directions in the training system since the 1985 introduction of traineeships.

As background to the report, *Issues and directions from a review of the Australian apprenticeship and traineeship literature*, this is a survey of more than 125 Australian apprenticeship and traineeship references from 1985 to 1999 drawn from NCVER and Department of Education, Training and Youth Affairs (DETYA) holdings and other State Government sources.

Each reference is summarised for its origin, key topics and key issues in the contemporary setting. The vast majority of the references cited in the report, *Issues and directions*, are discussed here; similarly, the vast majority of the references discussed here are cited in the report.

Annotated bibliography

Aboriginal and Torres Strait Islander Peoples' Training Advisory Council (ATSIPTAC) 1998, *New apprenticeship and traineeship opportunities for Aboriginal and Torres Strait Islander peoples*, ATSIPTAC, Dallas, Victoria.

Key: Industry-body paper on training delivery (to special groups)

Apprenticdeships and traineeships are seen as an opportunity for Aboriginal and Torres Strait Islander peoples to develop skills for work in traditional communities and in the wider community. ATSIPTAC supports targeting of traineeships to Indigenous peoples. Strategic marketing, content and delivery may overcome barriers excluding Aboriginal and Torres Strait Islander peoples from entering the workforce. Examples of good practice are given, suggesting a role for user choice and training intermediaries (group training companies, industry training advisory bodies).

Allen Consulting Group 1994, *Successful reform: Competitive skills for Australians and Australian enterprises*, report to the Australian National Training Authority, Brisbane.

Key: Report to government on training policy and training system

Vince FitzGerald's report critiques progress on reform directions set by the landmark 1989–90 Commonwealth–State agreements for competency-based training within a national training market. Training reform is seen to lack full employer and industry support, being centralised and supply-side rather than demand-side in focus.

Airing concerns about the National Training Board and Australian Standards Framework, the report pushes for a simpler national competency framework with automatic (legislated) mutual recognition, a national training market facilitation agency, 'user buys' training, business-led industry training adivsory bodies (ITABs), and an emphasis on entry-level training in vocational education and training (VET) funding.

The report is relevant to current debates on the training market and the role of enterprises therein. 'While many firms support key elements (of the training reforms)', FitzGerald summarises, 'generally speaking the reforms do not appear to have had a demonstrable effect on firms' decisions or productivity'.

Anderson, D 1997, 'Clients in the training market: Facts and fiction', in *Good thinking good practice: Research perspectives on learning and work*, 5th Annual International Conference on Post-compulsory Education and Training, Surfers Paradise, Centre for Learning and Work Research, Griffith University, pp.13–30.

Key: Academic paper on training delivery and training quality

The author argues that, in the 1990s reorientation of training policy from the supply- to the demand-side, actual VET students and trainees have been defined out of the client 'loop' and therefore cannot contribute to the maintenance of quality through consumer feedback. A possible exception where students might have some influence is in certain user choice arrangements for apprenticeships and traineeships.

Anderson, D 1997, *Competition and market reform in the Australian VET sector*, Review of research series, NCVER, Adelaide.

Key: Academic paper on training system and training market

The author surveys three major phases in the 1980s–90s development of the training market orthodoxy and reforms, which he sees to be a radical departure from previous practice. He perceives a history of assertion about market benefits, gaps in information on the size and structure of the market, and insufficient research on VET 'market' supply and demand, VET products and information. By implication, some of the research that does exist is seen to be ideologically rather than pragmatically inclined.

Anderson, D 1997, 'New apprentices and youth unemployment: Our progress as a nation', *Training Agenda*, vol.4, no.4, pp.14–16.

Key: Independent (academic) paper on training policy and industrial relations

This article queries the likely success of the Commonwealth Government's New Apprenticeship Scheme in providing youth employment and training, in the light of findings from other reports. It queries the importance of (reducing) training wages as an incentive to employers of apprentices.

Anderson, D 1998, 'Training markets', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, NCVER, Adelaide, pp.143–217.

Key: Academic paper on training markets

The author reviews the emergence through policy of the training 'market', noting that vocational education and training lacks preconditions (multiple buyers and sellers, relatively standard products, supply and demand information) for a true competitive market. He summarises supply-side (performance agreements, competitive tendering, preferred suppliers) and demand-side (fee for service, user choice, intermediaries, vouchers) models of competition and market reform. The paper examines 'mixed models' (part-competitive) of government funding and notes uncertainties about the intended (or unintended—private provider 'dependence' on government and cost-shifting) impacts of user choice.

This paper is relevant to considerations of State training profiles and VET funding paradigms, which could be said to combine demand- and supply-side considerations, following industry trends but also effectively favouring apprenticeship and traineeship funding.

Australian Education Council, Mayer Committee 1992, *Key competencies*, Australian Education Council and Ministers of Vocational Education, Employment and Training, Canberra.

Key: Report to government on young people's education (for work)

Developing the key competencies idea expressed in the Finn (1991) report, Mayer proposes seven key competencies that young people need to be able to participate effectively in the emerging forms of work, together with principles for nationally consistent assessment. The seven key competencies are: collecting, analysing and organising information; communicating ideas and information; planning and organising activities; working with others and in teams; using mathematical ideas and techniques; solving problems; using technology.

The Mayer competencies, although not adopted wholesale, have influenced the competencies for traineeships and influenced the requirements observable in traineeship and trade-related training packages endorsed since 1998.

Australian National Training Authority 1996, *Directions and resource allocations for 1997*, ANTA, Brisbane.

Key: Official report on training funding, policy and system

This is an example of the Australian National Training Authority's (ANTA's) reports and recommendations to ministers on State training profiles and resource allocations. Here, annual VET hours are estimated to reach 248m in 1997, up from 207m in 1994. An estimated $153m is to be set aside for purchase of places through contestable funding processes. States express a commitment to increase entry-level training places from 75 000 to 91 000 to support new apprenticeships.

Table 3.1 of the report shows that the proportions of VET clients in special groups match proportions in the general population. Comparison of the industry forecasts and the resource shifts suggests that areas with relatively large gains in provision in 1997 are either (a) low-growth areas that have had poor shares of VET funding—manufacturing, food, transport—or (b) areas of reasonable expansion and 'unmet' VET demand.

Australian National Training Authority 1996, *The report of the industry reference group on the implementation of the Modern Australian Apprenticeship and Traineeship System*, ANTA, Brisbane.

Key: Industry paper on training policy and system, training delivery

This industry report fleshes out the principles in the 1996 ministerial statement *Training for real jobs* (Kemp, D 1996). The group's recommendations cover marketing, clarifying roles of group training companies so they can focus on lifting training and bringing small business into training, better co-ordination and integration of VET in schools, the National Training Framework and possible removal of declared vocations, industry leadership, better focussing and monitoring of training agreements, and funding priority for contract-based training.

Australian National Training Authority 1998, *Directions and resource allocations for 1998: Report to the Ministerial Council*, ANTA, Brisbane.

Key: Official report on training funding, policy and system

This is another example of ANTA's annual series analysing State and Territory VET plans and recommending allocation of over $3bn in Commonwealth, State and Territory funds. The document sets out the strategic priorities for 1998 (the Australian Recognition Framework [ARF], New Apprenticeships, the training market) and advises the Ministerial Council whether State and Territory funding commitments will maintain effort in terms of total VET hours and enrolments.

Australian National Training Authority 1999, *Australian Recognition Framework arrangements*, ANTA, Brisbane.

Key: Official paper on training system

This update of the original 1998 Australian Recognition Framework document summarises ARF objectives and principles, particularly the mutual recognition across States and Territories of: qualifications; registration and accreditation decisions; registered training organisations (RTOs); and RTOs' initial or 'primary' recognition authority. The update reflects Ministerial Council's 1998 decision that self-accreditation apply only when no endorsed training package exists.

Australian National Training Authority Board 1997, *The report of the ANTA Board on the implementation of New Apprenticeships (including user choice)*, ANTA, Brisbane.

Key: Report to government on training policy and training system

This early review report on the Commonwealth Government's 1996 New Apprenticeships initiatives emphasises the need for a flexible and straightforward system of training. It discusses the new regulatory framework of training packages, training providers and training agreements.

It recommends a 'high' priority for New Apprenticeships in VET resourcing and endorses the continuing relevance (albeit with some outcomes-related funding reforms) of group apprenticeships. The summary view is one of 'significant progress' in implementation.

Axarlis, S & Cheshire, C 1998, 'It's really all about giving options', *Australian Training Review*, no.27, NCVER, Adelaide, pp.14–15.

Key: Industry view on training system

The senior industry figure discusses what New Apprenticeships can do for industry. New Apprenticeships are seen as a response to future requirements of industry, the key value being flexibility.

Ball, K & Robinson, C 1998, 'Young people's participation in and outcomes from vocational education and training', in *Australia's youth: Reality and risk*, Dusseldorp Skills Forum, Sydney, pp.66–73.

Key: Official paper on participation in education and training

This article documents changes in the participation and outcomes of 15–19 year olds in the VET sector since 1990. Their decreasing (numerical) participation in VET is seen as a function of changing demographics rather than changing aspirations.

The authors also attribute the changing VET study streams of 15–19 year olds over 1990–94 (trades – complete down from 32% of total to 17%, other skills up from 11% to 20%, higher technician up from 6% to 10%) to changes in labour market demand.

The changes also need to be considered in the context of a number of major VET funding and policy changes since the late 1980s.

Barnett, K 1995, *Australian industry and enterprise training providers*, NCVER, Adelaide.

Key: Official paper on training delivery

This sample and case study survey of industry (e.g. group training company, industry body and skill centre) and enterprise training providers took place before the introduction of the current Australian Recognition Framework. Interesting aspects are the providers' preferences not to use benchmarking, the perceived high complexity of provider recognition of prior learning (RPL) as then practised, and the willingness to use general principles of training reform and competency-based training (CBT).

Billett, S 1998, 'Changing relationships between the vocational education systems and their clients', *Unicorn*, vol.24, no.3, Australian College of Education, Deakin West, ACT, pp.60–72.

Key: Academic paper on training system and delivery

The author contrasts Australia's 'centralised and corporate' approach to VET with 'voluntarism' in other countries. He argues that the high degree of industry focus in recent VET policy has not actually captured industry or led to increased employer investment in training, and contrasts the recent decline in Victorian apprenticeships (1990–96) with the growth in 'individual' investments in associate diploma training.

The author believes that the right course, rather than amere shift from industry to enterprise concerns, is towards a model of 'mutuality' in VET. Under such a model, planning would be decentralised and localised to serve four main client types—individuals, enterprises, regions and industry.

Billett, S & Cooper, M 1998, 'Returns to enterprises from investment in vocational education and training', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, NCVER, Adelaide, pp.57–90.

Key: Academic paper on training costs

This paper summarises recent findings on training investment and suggests research directions. The authors note that larger enterprises are making a larger investment in training and have a much better knowledge of the system (e.g. the role of ITABs) than small businesses.

The training needs of some enterprises (metals, construction, hospitality) are seen to be 'furnished by existing publicly funded VET provisions' through recognised apprenticeships and traineeships; such enterprises will invest less in training than enterprises in emerging industries. More work is urged on the different training burdens, and differential access to public VET funds, of enterprises according to size, specialisation and location.

The authors choose to discuss enterprise returns on training investment in general terms (increased productivity and quality, cost savings, workforce motivation and flexibility), finding conflicting or unclear evidence about the importance of the direct cost-benefit relationship between training and profit. 'The twin policy goals of increasing the quantum of training and securing the sponsorship of that training by enterprises', they conclude, 'are not being realised'.

Borthwick, J 1998, 'VET in 1996', in *The market for vocational education and training*, eds C Robinson and R Kenyon, NCVER, Adelaide, pp.102–24.

Key: Official paper on education and training participation, performance measurement and quality assurance

The paper begins with a snapshot of VET in 1996—1.3m clients, nearly 50% of clients in trade or other skilled courses, over 60% of clients taking less than 200 hours training, almost 1000 providers receiving public VET funds of $3.5bn.

The author notes recent efforts to increase VET data quality and reliability and summarises the 1996 ANTA performance measures—e.g. participation, graduate outcomes, employer satisfaction, 'module load' completion rates (per government dollar), and government expenditure per annual hours.

Noting the evidence for considerable unmet demand in VET, the author also reviews the evidence (Allen 1994) that TAFE (44%) and enterprise (17%) have the biggest shares of the *total* public and private pool of VET expenditure. She explains that the 'module load' concept arises as a measure of output because not many people complete qualifications. She characterises the recent trends in VET performance measures in terms of shifts from: inputs to outputs; institutions to enterprises; qualifications to skills; courses to modules; classes to flexible delivery; and providers to customer choice.

Brennan, T 1995, 'Meeting the challenges of the Australian Vocational Training System', in *AVTS conference papers*, IIR, Sydney.

Key: Official paper on training system

This paper summarises government initiatives and reports leading to the introduction of the Australian Vocational Training System (AVTS) in 1994 and the embellishments (youth training initiative, national training wage, student traineeships, NETTFORCE organisations) introduced by the 1994 *Working nation* report. It gives a generally positive progress report on AVTS.

Buchanan, J & Sullivan, G 1996, *Skills formation in the construction industry: Lessons from some recent innovations*, ACIRRT, University of Sydney.

Key: Academic paper on training system, innovation and delivery

This report summarises 30 recent innovative schemes for skill formation in construction. Practical initiatives are seen to spring from VET reforms, skill centres and group training schemes, or particular projects and sites. The authors observe that public funds underpin innovations, which are rarely implemented purely by business. They suggest policy reforms such as registers of innovation, new approaches to regional co-ordination of skill formation, and reformation of project management practices.

Catts, R 1996, *Validating training benefits in the workplace*, VET Research Institute, University of Southern Queensland.

Key: Academic paper on training culture and training costs

This report studies structured training in four Queensland provincial small to medium enterprises. Their formal (structured) training is found to be that provided by vendors-suppliers. The firms studied cannot see the company benefit of structured training and are reluctant to pay for it unless there is government support. Hence, the author recommends some form of government (demonstration) funding to show uncommitted small firms the benefits of formal training.

Centre for Labour Market Research 1997, *Evaluation of the impact of the financial incentives on the recruitment of entry-level trainees*, Department of Employment, Education and Training, Canberra.

Key: Academic paper on training costs

This paper considers, and gives a reasonably positive report on, the effects of financial incentives on employers' decisions to recruit apprentices and trainees, particularly the impact of the Department of Employment, Education and Training (DEET) (now DETYA) employer incentives.

The sample study confirms earlier case study results that employers claim they would take on more apprentices with higher subsidies, but it would take about 100% increase in the relevant subsidy to get 40% of firms to take on more apprentices. A training wage cut of 50% would get 50% of firms to take on more apprentices. Comparing subsidy compensations to wage cut

compensations, the Centre for Labour Market Research (CLMR) finds the former to be the more powerful incentive to employers. Similar types of results hold for traineeships.

The centre also finds that apprentices are a net cost, which declines in each successive apprenticeship year, but employers are factoring gains after the fourth year into their decision calculus. In the case of traineeships, the costs are lower and employers 'on average, believe trainees are as productive as other workers by the end of one year'.

Chapman, G & Thorn, W 1989, *Traineeships at TAFE: Impact at college level*, Department of Technical and Further Education, Sydney.

Key: Official paper on training system and training delivery

This paper, the second part of a two-part study, surveys TAFE staff to investigate the impact of the Australian Traineeship System (ATS) on college operations. The first part analyses trainees undertaking training in New South Wales technical and further education (TAFE) colleges in 1987. Issues addressed include the adequacy of plant and equipment for off-the-job training, the lead times for course implementation, ATS planning and staff development needs.

A contemporary point would be to compare ATS responsiveness to that now found in New South Wales (or other States) under the current training market.

Comyn, P 1998, 'Training packages: Opportunity or threat', *Training Agenda*, vol.6, no.3, pp.9–10.

Key: Industry paper on quality assurance

This is an example of a particular industry (rural) sounding an early note of caution that training packages will only realise their full potential through improvements in their flexibility and in attendant arrangements for professional development and quality assurance. Co-operative arrangements and alliances between industry and training providers are seen to be part of the answer (for the rural industry).

Construction Industry Training Board 1998, *The future of training in the building and construction industry—a discussion paper*, Construction Industry Training Board, Adelaide, p.18.

Key: Industry paper on training system, supply and demand

This report puts it that changes in the construction industry, particularly the increasing concentration of small or project-based firms and the increasing marginal cost of hiring apprentices, will cause inevitably greater difficulties in maintaining the flow of skilled labour into the industry.

The report urges serious consideration of structurally different models for construction industry training, including school-based training and an 'internship' model where an intensive off-the-job training program precedes an on-the-job internship. The internship is presented as one means of 'breaking the nexus' between training and the need for paid employment.

Curtain, R 1995, 'Employers and access to publicly funded training', *Australian Economic Review*, 110, pp.93–100.

Key: Academic paper on training policy and training market

This article notes criticisms that Australia's training system is dominated by supply- rather than demand-side management. It identifies five broad VET funding options for a more responsive training market—via government but with performance agreements, via competitive tendering, via government intermediaries, via independent intermediaries, and through 'user buys'.

The author notes that Australia is moving towards 'user choice' instead. Looking at overseas experience, his concern is that this will not work unless more attention is paid to the need for objective information on providers and the continuing development of independent (group) training brokers.

Curtain, R 1996, *Is Australia locked into a low skills/low quality cycle?*, Working paper no.10, Monash University–ACER Centre for the Economics of Education and Training, Melbourne.

Key: Academic paper on industry training and training delivery

This study surveys the evidence that Australia is a 'low skills' economy with low levels of the intermediate skills (including high-level trade and technical) needed to compete internationally. Curtain distinguishes between conventional needs for entry-level training, including small business (relatively well addressed by government) and the 'export-exposed sectors in manufacturing and services', where there is an unmet 'challenge for government, employers, unions' to 'consciously foster high-level intermediate skills'.

The author points to the narrow focus of trade training (limited acquisition of key competencies), industrial constraints on training innovation (AVTS evidence), limited and unstrategic approaches to enterprise skill formation found in the Allen report, the 1994 Australian Bureau of Statistics (ABS) Employer Training Practices Survey and other surveys.

'The quality of the skill formation process in Australia', concludes Curtain, 'is seriously deficient', this being attributed to the small size and low technology base of Australian firms (and Australian industry generally). He criticises the industrial relations first, training second, approach to training in Australian VET law and practice, noting particularly limited 'mentoring' and *a laissez-faire* attitude to the on-the-job training.

Searching for solutions, Curtain notes that the conventional balance sheet treats training investment poorly compared to capital investment. He recommends that Australia examine the United Kingdom Investors in People Program and the fostering of enterprise learning networks, perhaps involving the universities for the high skill end of the market. Government should be targeting long-term skill formation and could also consider individual learning accounts, loans and tax credits. Finally, there should be 'comprehensive' reform of apprenticeships (better competency acquisition, enhanced supervision and industrial arrangements) and an emphasis in State profiles and funding on rewarding quality and performance (not just cost-effectiveness) among registered training providers.

Curtain, R 1996, *Meeting the training needs of flexible workers*, a national project managed by CIT and funded by ANTA, ANTA, Brisbane.

Key: Official paper on training system and (traineeship) delivery

Nearly 50% of employed Australians are said to be in non-standard (self-employed, part-time or casual) jobs. 'The limited access to training for persons in non-standard employment' is cited as a reason for not meeting 'Finn' participation targets for young people. Only a minority of employers of casual workers surveyed say they would offer training. One recommendation to emerge is a part-time traineeship based on a single 'learning agreement' between training providers and individuals and possibly covering different periods of employment.

Curtain, R 1996, 'Skills for small, high tech exporters: Overcoming the "transition" problem', in *The economic impact of vocational education and training*, eds C Selby Smith and F Ferrier, AGPS, Canberra, pp.170–8.

Key: Academic paper on (industry change and) training delivery

This is a rare study on skills in (eight) leading edge Australian firms (e.g. graphics, IT, publishing and leisure, high tech manufacturing). Despite their reliance on knowledge workers, the finding is that recently established high tech exporters often fail to make the transition from an '*ad hoc* craft mode of product development to an organisational structure capable of further expansion'. The firms are, however, showing signs of forming learning networks, and this reminds the author of the voluntary United Kingdom Investors in People Program.

Dandie, S 1996, *Economic analysis of employment-based entry-level training: An analysis of trends in apprenticeship training*, Discussion paper 96/5, Centre for Labour Market Research, Murdoch University, Perth.

Key: Academic paper on (apprentice) supply and demand

This paper discusses trends in the apprenticeship system, including the average age of apprentices and the ratio of tradespersons to apprentices. The author notes that the apprenticeship system is dependent on the demand for output from the trades. Structural change is occurring as technological production declines or becomes obsolete. Although there was an upward trend to 1990 in the total number of apprentices employed, there have been declines since in metal, electrical and vehicle trades.

Contrary to perceptions of overall trade decline, the author finds a reasonably constant relationship between the number of apprentices in training and the number of tradespersons employed across *all trades* over the past decade. This does not suggest wages for apprentices are too high relative to trade wages. The decline in the number of apprentices in the metal, electrical and vehicle trades and the growth in the number of apprentices in the food trades is seen here as a function of the demand for output.

The average age of apprentices has increased over the decade (to nearly 17), as governments have succeeded in increasing school retention rates. As labour markets are restructured and existing trades decline, the challenge for the apprenticeship system will be to continue to be relevant and to become more flexible in the trades it supports.

Dawkins, J 1988, *Industry training in Australia: The need for change*, AGPS, Canberra.

Key: Government paper on training system and funding

This paper cites the 'inadequacy of the present national training effort' to address 'persistent skill shortages' which exist across a range of industries and occupations—about 30 trades being listed in 1987 as short-supplied for migration purposes.

Major disincentives to training are seen to include rigid award structures, poaching, poor career paths, high turnover, and poor management attitudes. The report is critical of inflexible time-based apprenticeships and urges the adoption of competency-based training and reform of industry training networks.

Among other things, the report discusses the distribution of training costs and, arguing that industry should do more, sets the scene for the introduction of training levies in 1990.

Department of Education, Training and Employment of SA 1998, *The State strategic plan for vocational education and training*, DETE, Adelaide.

Key: Official paper on training system and delivery

This is an example of a recent State paper setting out strategic directions and training priorities at State level.

The document notes the economic, restructuring and skills pressures facing the South Australian economy. Up to 20% of the public VET funds are to be contestable by 2000, in the open training market, New Apprenticeships, and user choice. Based largely on employment and industry projections, the following sectors are to receive above-average (2.5–5.0%) increases in VET funds: food; tourism and hospitality; community services; computing; and transport and storage.

Also discussed are major directions for training improvement, including TAFE rationalisation, benchmarking and quality systems, flexible delivery, VET in schools and universities, and small business. The paper concludes with a general account of performance and outcomes against national (ANTA) key result areas.

Department of Employment, Education and Training 1992, *Department of Employment, Education and Training: Review 1992*, AGPS, Canberra.

Key: Official report on (DEET performance in) training system and delivery

The report (chapter 2) summarises the Department of Employment, Education and Training's (DEET's) role in major VET developments over 1989–92:

- VET ministers' agreement in April 1989 to a national training board to implement competency-based training
- VET ministers' agreement in October 1990 to the development of a training market and a new national accreditation framework
- subsequent establishment of an Australian Committee for (the development and exchange of national) Training Curriculum, competency standards bodies to develop industry competencies and a general eight-level Australian Standards Framework for use by industry

- VET ministers' agreement to a National Framework for the Recognition of Training addressing national accreditation, credit transfer, registration of providers, recognition of prior learning and the assessment of competencies
- general endorsement in June 1992 of an Australian Vocational Certificate Training System (AVCTS) for integrated entry-level training

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Department of Employment, Education and Training 1993, *Department of Employment, Education and Training: Annual report 1992–93*, AGPS, Canberra.

Key: Official report on (DEET performance in) training system and delivery

The report (chapter 6) summarises DEET's role in major VET developments of 1992–93:

- formal Commonwealth–State agreement in July 1992 to establish a new national VET system with agreed objectives and funding, an effective public–private training market, improved opportunities and outcomes, and better cross-sectoral links
- the establishment of an Australian national training authority in December 1992
- approval of 105 work-based (i.e. under training contract) or institutionally-based AVCTS pilots by June 1993
- announcement in July 1992 of flexible Career Start Traineeships (CSTs) as a bridge from traineeships to AVCTS

Department of Employment, Education and Training 1994, *Career start traineeships: Guidelines*, DEET, Canberra.

Key: Official paper on training system, innovation and delivery

This departmental guideline summarises CST in terms of essential features, key competencies, eligibility, employer and trainee assistance, noting that the program is a more versatile form of traineeships with variable terms of on- and off-the-job training and no age limits. CST is a 'bridge between current training arrangements and the emerging Australian Vocational Certificate Training System'.

Department of Employment, Education and Training 1995, *Training in transition: Evaluation of the AVTS pilot phase 1993 and 1994*, AGPS, Canberra.

Key: Official paper on training system

Noting the key aim of AVTS as 'establishing a cohesive and pervasive entry-level training system which provides substantial improvements in school to work transition', this report evaluates 4000 AVTS traineeships recorded by DEET to the end of 1994.

This generally positive evaluation notes the different forms of AVTS and the differing extents to which they are industry led. 'A comprehensive, industry-driven system of training can be implemented in Australia', it concludes. Some technical issues raised are relevant to today's training packages—i.e. moving away from time served, integrating on- and off-the-job training, costs of assessment and assessment in the workplace.

Department of Employment, Education, Training and Youth Affairs (DEETYA) 1997, *Service requirements for the employment services request for tender*, DEETYA, Canberra.

Key: Official paper on (employment and) training services delivery

This paper sets out, *inter alia*, the service requirements for entry-level training (ELT) support services (New Apprenticeship Centres) for their first contract period of May 1998–November 1999. Their stated objective is to 'streamline services to employers, apprentices and trainees by providing a one-stop integrated support service' (e.g. ELT information, ELT marketing, administering ELT support services and payments, handling training agreements). The key performance indicators are set in terms of commencements, completions, efficiency of processing and customer satisfaction.

A companion paper (*Tendering conditions and draft contract*) notes that DEETYA may seek to contract for 'up to 116 000–128 000 apprenticeships and traineeships' annually. This may be compared to the actual figure of 134 000 commencements for calendar year 1998.

Department of Employment, Education, Training and Youth Affairs 1998, *Labour market for apprentices: Employer and group training company (GTC) experience in recruiting apprentices*, AGPS, Canberra.

Key: Official paper on supply and demand

This 1997 study was undertaken in response to anecdotal evidence of employers' difficulties finding apprenticeship applicants of quality. The report, surveying 350 employers and 50 GTCs, summarises GTC areas of recruitment difficulty on a State-by-State basis.

Employers and group training companies reported that, although 70% of initial applicants were unsuitable, *sufficient suitable apprenticeship applicants* were available, in most locations, for most apprentice positions in the current labour market. On average, employers had seven suitable applicants per vacancy (10 in metal trades) and GTCs had three.

Suggestions for improvements in the apprenticeship system include better information in schools, better and more flexible (shorter) training and more employer incentives.

Department of Employment, Education, Training and Youth Affairs 1998, *Skills in Australia: Trends and shortages*, Analytical series 98/5, DEETYA, Canberra.

Key: Official paper on supply and demand

At June 1998, DEETYA reports skill shortages in very few professions and trade occupations. Many of these shortages are for specialisations or particular experience requirements. Trades in short supply include toolmaker, boilermaker, sheetmetal worker, chef, pastrycook and hairdresser. 'Trades shortages', DEETYA comments, 'typically reflect factors such as occupational wastage, lower apprentice intakes in the early 1990s, wastage during training, and unemployed tradespersons unable to meet the demands of new technology, rather than strong growth in the demand for these skills'.

Department of Employment, Workplace Relations and Small Business (DEWRSB) 1998, *Report of the legislation review of the Tradesmen's Rights Regulation Act*, DEWRSB, Canberra.

Key: Report to government on training regulation

This report recommends that, with the advent of Australian Recognition Framework mechanisms, registered training organisations could be tasked to assume the long-established Tradesmen's Rights Regulation Act's functions of assessing and recognising metal and electrical trade skills developed overseas, informally in Australia, or in the Australian Defence Force.

Department of Labour Advisory Committee 1988, *A discussion paper on competency-based trade training*, DOLAC, Canberra.

Key: Official paper on training system and training delivery

This paper analyses international trends and structural changes in Australia (increasing specialisation by firms) and recommends that States and Territories move to competency-based training (CBT) for the trades. Variations are noted across States in existing legislation and regulatory procedures. The working party anticipates that CBT will not necessarily solve the 'narrow' or demarcated nature of trade training and that (as is the case today) competency outcomes will not necessarily align with award and wage outcomes.

Dockery, AM, Kosky, P, Stromback, P & Wiwi Ying 1997, *The cost of training apprentices in Australian firms*, Discussion paper 97/3, Centre for Labour Market Research, Murdoch University, Perth.

Key: Academic paper on training costs

This paper considers the enterprise costs of apprentice training against the background of human capital theory—apprentices should bear some costs of their general training because they reap substantial benefits. Recent overseas and Australian studies find apprentice training a net cost to firms, as does this study. On average, (59) firms surveyed incur a net cost of $22 000 over a four-year apprenticeship, with the cost of $13 000 in year one tapering to a small benefit by year four. This trend is mainly because output increases relative to wages as supervision cost tapers off.

Ninety per cent of the cost variation is within rather than between trades, although the food and hairdressing groups have strikingly lower costs and higher benefits compared to seven other major trade groups. Surprisingly, most firms perceive a net training benefit rather than cost, perhaps factoring in benefits after year four. The paper queries employer incentives as a major factor in apprentice recruitment. It notes that post-1996 policy changes may shift costs to apprentices at the margin and that costs are shared quite differently (individuals and governments pay more than firms) in professional training.

Down, C 1998, 'Reflecting on practice: Research on a major change process within the Ford Motor Company (Australia) Ltd', paper presented to the NCVER Seventh Annual VET Researchers Conference, Charles Sturt University, Wagga Wagga.

Key: Industry paper on training policy and delivery

This paper on the sociology of training reform argues that Ford, although a large and influential company, has sometimes found the national process at odds with its own enterprise and shop floor reforms over 1990–95. Though the company is positive about some State and ITAB involvements, enterprise reforms—e.g. an Advanced Certificate in Auto Development—are supposed to have been squeezed out of an inflexible or top-down national framework. These issues could now be reviewed in a post-1998 or training package context.

Dusseldorp Skills Forum 1997, *School–industry programs: Some comparisons between the States and Territories*, DSF, Sydney.

Key: Independent study of training in schools

The study is based on a 1996 Australian Council for Educational Research (ACER) survey (of nearly 80% of Australian schools) and finds high variability across States in school–industry programs' duration, industry specificity, labour market relevance and assessment practices. The Australian Capital Territory, Northern Territory (and Tasmania) appear to have the 'best fit' of programs to workplaces, schools, and the VET system of certification. Limited apprenticeship and traineeship credit is found, although the evidence on this point is unclear.

Employment and Skills Formation Council (ESFC) 1990, *Industry training advisory bodies: Report of the National Board of Employment, Education and Training and its Employment and Skills Formation Council*, AGPS, Canberra.

Key: Official report on training delivery

This is the advice of the National Board of Employment, Education and Training concerning the role and functions of ITABs in relation to skills formation and award restructuring. The ESFC makes a number of recommendations about the governance, management and funding of ITABs.

Employment and Skills Formation Council (L Carmichael, chair) 1992, *The Australian Vocational Certificate Training System*, National Board of Employment, Education and Training, Canberra.

Key: Report to government on training system, training in schools and industrial relations

The Carmichael report is a significant step along the path of integrating trades and traineeships in the Australian Qualifications Framework of today. The ESFC recommends that there be an Australian Vocational Training Certificate System with four vocational certificate levels, each to be achieved on a competency basis, backed up by certificates of competency and provision for recognition of prior learning.

The report endorses 'Finn' targets (Finn 1991) for education and training participation and suggests means for their delivery in (separate) senior colleges and in TAFE. It also includes a suite

of recommendations for integrated VET networks, flexible work-based training, industry-level training plans, industry or enterprise-level training agreements, enhanced training advisory and group training arrangements, improving access and equity, and more equitable arrangements for training wages and training allowances (extension of AUSTUDY to the VET sector).

Several areas of this report are quite contemporary, including the discussion of 'integrated VET networks' and flexible pathways to (what is now) the AQF 3 (Australian Qualifications Framework 3). The report also recommends a 50% target for women in VET courses by 2001.

Employment and Skills Formation Council (P Kirby, chair) 1996, *The good, the bad and everything in between: The quality and relevance of* Working nation *training*, National Board of Employment, Education and Training, Canberra.

Key: Report to government on training system and training delivery

The report finds highly variable training quality under *Working nation*, its rhetoric and that of the national training reform agenda being 'well ahead of the capacity of the training sector and industry to deliver'. The trend of recommendations is to rein in hastily developed training organisations and traineeship activities (including fully on-the-job traineeships) which are out of kilter with the emerging National Training Framework.

Finn, B (chair) 1991, *Young people's participation in post-compulsory education and training*, AGPS, Canberra.

Key: Report to government on participation in training and training in schools

This Australian Education Council review of post-compulsory education and training argues for increasing investment in Australia's skill development. Notably, it discusses key competencies and sets targets for young people's levels of qualification, two of which were later agreed by the Ministerial Council on Employment, Education, Training and Youth Affairs (MCEETYA) for annual reporting by ANTA:

- by 2001, 95% of 19 year olds should have completed Year 12 or an initial post-school qualification or be in recognised education and training
- by 2001, 60% (the report originally recommended 50%) of 22 year olds should have attained or be progressing toward an AQF qualification at Level 3 or better

Supporting the targets is a range of recommendations for guarantees of educational participation, key competencies and national curriculum, more varied education and training 'pathways' for young people, and delivery arrangements that separate the compulsory from the post-compulsory.

FitzGerald, V 1998, 'Market frameworks in VET', in *The market for vocational education and training*, eds C Robinson and P Kenyon, NCVER, Adelaide, pp.11–22.

Key: Independent paper on training markets

In this revamp of a 1994 paper, FitzGerald defines the training market as 'that part of the education and training system which provides individuals with the skills and learning expressly required by enterprises and industry' and distinguishes therein providers, purchasers, clients and outputs. The total purchaser market is estimated to be over $6bn, comprising TAFE ($3bn),

enterprises and suppliers (each about $1bn), and adult and community education, commercial providers, non-profit providers and skill centres (each $0.2–0.5bn).

The author notes the market share and pervasive influence of government as a direct funder and also purchaser of VET. Although TAFE is organised at college level in some States (e.g. Victoria), as a whole 'only minimal pressure has been exerted on the TAFE system to improve its performance'. For genuine user choice to be extended, 'meaningful product descriptors and outcomes measures' are a must, as these would enable a better match of products to organisational requirements and a more efficient, energetic and innovative tender process.

The author suggests that other countries may be doing better than Australia in terms of essential market adjuncts such as VET performance information (United Kingdom) or quality processes (New Zealand). He sees the VET role of government as determining the rules (including the qualification framework) and not the outcomes, and notes that user choice can be used effectively to convey actual enterprise needs directly to providers.

Fooks, D 1998, 'Crunch time: Living under the new ANTA Agreement', *Training Agenda*, vol.6, no.1, pp.24–7.

Key: Independent paper on training system and training funding

This article represents an alternative view on the major reforms to VET under way at present, including New Apprenticeships and user choice. The author's view is the (funding) reforms may lead to lower levels of training and lower quality. He is particularly concerned at the drying up of ANTA 'growth' funds and argues that 'government outlays on New Apprenticeships will be minimised by promoting one-year traineeships'. He mistrusts the push toward VET in schools.

Fooks, D 1998, 'Industry partnership: Leaning on a broken reed', *Training Agenda*, vol.6, no.3, pp.15–16.

Key: Independent paper on training policy

The author argues that industry's domination of bodies such as ANTA is not being rewarded by increased industry investment in training. He sees that better information on industry training is required and that it may be time to reconsider more directive measures (e.g. levies) to foster training.

Foster, S 1998, *Competency-based training in Victoria*, OTFE, Melbourne.

Key: Official paper on training system and delivery

This paper uses a mixture of desk research and interviews to review the Victorian impact of CBT, introduced in 1992 as a plank of the national training reform agenda.

The author notes that the impact of CBT so far has mainly been at lower AQF levels, in high-training industries, and in the changed role of teachers and greater flexibility of delivery. CBT as practised has been more like assessment against a learning outcome rather than direct assessment against a standard, but this will (or ought to) change under the new training packages. Packages also open up the prospect of a greater range of pathways (to AQF 3) but a system geared primarily to 'courses' will need to adapt to the idea of assessment directly against standards.

Fraser, D 1996, *The training guarantee: Its impact and legacy 1990–1994*, DEETYA, Canberra.

Key: Official report on training system and funding

The report finds that, 'for the time' (one of recession), the since-suspended Training Guarantee levy has had a positive impact on firms' training expenditure and plans. 'It appears to have generated somewhere between $20 and $100 of new industry investment in training for every Commonwealth dollar spent'. The reported negatives in this evaluation imply poor targeting of the guarantee—little impact on low-training industries, small business, or access for disadvantaged groups.

Gibb, J 1998, 'Vocational education and training and small business', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, NCVER, Adelaide, pp.91–142.

Key: Official paper on training culture and training delivery (in small business)

The paper notes the limited penetration of (structured) training into small business and the ANTA requirement for small business sections in State training profiles.

The author notes the variety of recent government reports on small business (training) and discusses recent work on flexible or workplace-based training delivery for small business, including mentoring programs. Training for small business is increasingly recognised to be informal, conducted on-site or involving business advisors. However, recent research suggests small business may not take readily to *formal* workplace learning.

Gibb, J 1999, 'The relevance of a training culture to small business in Australia', in *Lifelong learning: Promoting a training culture*, eds C Robinson and K Arthy, NCVER, Adelaide, pp.39–62.

Key: Official paper on training culture and training delivery (in small business)

The paper puts it that the VET system tends to project a view of structured, accredited training which, no matter how well constructed, small business does not need. A 'cluster' of business development, management and performance services might be more attractive.

The author notes the roles of group training companies (carrying 23 000 out of 123 000 apprentices in 1997), NETTFORCE, and (since 1998) New Apprenticeship Centres, in delivering training services to small business. A trend of recent research is to enumerate the ways in which workplace learning may take the place of formal training in small business.

In conclusion, the author cites recent Victorian (Office of Training and Further Education [OTFE]) work suggesting that small business does value and use informal, non-accredited training, and suggests VET measures—such as providers delivering training for enterprises in groups, or improved on-the-job traineeships—might respond to this preference.

Glover, L 1998, 'International Fibre Centre: A study of training innovation', in *Future training issues in Australia's industries*, a collection of the papers presented at the NCVER 1998 conference: Industry Training Outlook '98, Sydney, 12–13 October 1998, ed. P

Curtin, NCVER, Adelaide, pp.105–7.

Key: Industry paper on training innovation and delivery

This brief paper summarises the market reasoning behind Victoria's funding of an International Fibre Centre (actually opened March 1999) as a centre of excellence linking industry, education and training providers, and researchers. The facility is to be open under 'flexible access and (technical) staffing arrangements which will allow for the plant and equipment to operate on demand' to textile, clothing and footwear (TCF) firms and education and training providers.

Guthrie, H & Barnett, K 1996, *Training and enterprise bargaining*, NCVER, Adelaide.

Key: Official paper on (industrial relations and) training delivery

Surveying nearly 2000 enterprise bargains logged with the Commonwealth Department of Industrial Relations (DIR), this study finds that only about 33% make reference to training, and only 25% make reference to structured training. Where a training provider is designated in such agreements, it is more often in-house rather than a private provider or TAFE. Training enterprises are found to be reluctant to go through the national registration processes of the time. There is limited understanding of the links between enterprise training, enterprise core business and the formal training system.

Hager, P 1998, 'Quality assurance in vocational education and training', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, NCVER, Adelaide, pp.340–62.

Key: Academic paper on quality assurance

This paper notes the recent ANTA emphasis on quality and benchmarking and reviews a variety of approaches to quality management that have been used recently, more so by individual VET providers and programs than in the system-wide approval and regulatory processes. The author suggests that quality assurance (i.e. international or Australian standards approaches), best practice, benchmarking, and self-managed teams, are promising approaches in the Australian context.

Hawke, A & Wooden, M 1997, *The changing face of Australian industrial relations*, National Institute of Labour Studies, Adelaide.

Key: Academic report on (industrial background to) training delivery

This report summarises the post-1980s shift from a centralised award determination system towards enterprise-based certified agreements and workplace agreements. Trade union membership has fallen from 50% (1976) to 30% (1996) of the workforce. The remaining membership is concentrated in far fewer unions.

The drivers for these shifts include structural change in the labour market, higher unemployment, increasing competition, technological change, and new forms of workplace organisation.

Hawke, G 1992, 'The national training reform agenda: An Employment and Skills Formation Council and personal perspective', in *What future for technical and vocational and education and training?*, vol.2, conference papers, ed. W Hall, NCVER, Adelaide, pp.179–86.

Key: Independent (ESFC) paper on training reform

This is an early post-Carmichael report (ESFC 1992) paper. The author discusses Carmichael's recommendations for competency-based training, youth participation, TAFE funding and 'integrated networks and pathways' for VET. With hindsight, many of these initiatives are now part of the VET orthodoxy. The author, however, notes some early reluctance in the schools sector to the ideas of networks and pathways.

House of Representatives Standing Committee on Employment, Education and Training 1991, *Skills training for the 21st century: A report on skills training: Apprenticeships and traineeships*, AGPS, Canberra.

Key: Government report on training system

The committee supports widespread reform of Australia's education and (apprenticeship) training system, training and education being fully integrated to encompass schools, industry training and tertiary education. It believes industry will increasingly provide off-the-job training.

Recommendations cover: teacher release to industry; formal training agreements between employers and entry-level trainees; national principles for adult education; a training wage; a policy framework linking general and vocational education; a national framework for the recognition of training and credit transfer; funding of the public sector VET component; national registration procedures for private providers of training; and continued funding support for group training schemes.

Jarvis, J 1998, 'Four paths for printing', *Australian Training Review*, no.27, NCVER, Adelaide, p.10.

Key: Industry paper on training system and delivery

This paper examines New Apprenticeships in the printing and graphic arts industry. The Printing Industry Training Council official concludes that New Apprenticeships have opened up training and skill recognition opportunities previously denied to a large proportion of the workforce.

Jenkins, R 1999, 'Training challenges in Australia's manufacturing industries', in *Future training issues in Australia's industries*, a collection of the papers presented at the NCVER 1998 conference: Industry Training Outlook '98, Sydney, 12–13 October, ed. P Curtin, NCVER, Adelaide, pp.25–9.

Key: Industry paper on training system, industrial relations, supply and demand

This is an industry perspective on the changing world of work in the context of the Australian Industry Group (AIG), a successor to the Metal Trades Industry Association of Australia (MTIA) and the Australian Chamber of Manufactures (ACM). The employment environment for manufacturing is discussed, the author noting that training is rarely considered in enterprise

bargaining. Turning to New Apprenticeships, the author lists AIG concerns as low apprenticeship commencements, skill shortages (for top tradespersons), continuing system complexity, and potential erosion of Australia's skill-base advantage.

Keating, PJ, House of Representatives 1994, *Working nation: Policies and programs*, AGPS, Canberra.

Key: Government paper on employment and training policy

This Prime Ministerial employment policy statement also includes a review (chapter 4) of education and training. Noting Australia's high rates of youth labour force participation and low rates of youth education and training, the statement recommends assorted new policies for young people and for the training system.

These policies, some implemented in one form or another, include: a national training wage, suspension of the Training Guarantee, a Youth Training Initiative, student traineeships, NETTFORCE training marketing, increased employer incentives for training, a more responsive training system to overcome difficulties with the then National Framework for the Recognition of Training, and increased small business training.

Kelleher, J 1989, 'Australian Traineeship System: An analysis of the curricular design features', masters degree paper, available from VET Clearinghouse, Department of Vocational Education & Training, Hobart.

Key: Academic paper on training system and training delivery

This study by a Tasmanian Department of Employment official was prompted by the lack of research on curriculum design in traineeships. He concludes that (nationally oriented) traineeships may not meet long-term goals without amendments to curriculum design, especially for the on-the-job training element. This study resonates with current research gaps, and with difficulties concerning 'on-the-job' type traineeships.

Kemp, D, House of Representatives 1996, *Training for real jobs*, AGPS, Canberra.

Key: Government paper on training policy and training system

This ministerial statement articulates the incoming government's proposals for training reform to support Australian business growth and create employment opportunities.

The statement advocates a Modern Australian Apprenticeship and Traineeship System (later called New Apprenticeships) with training for real jobs, new (i.e. more flexible and widespread) apprenticeships and traineeships, a business-led training system, more vocational education and training opportunities in schools, access and equity in training, training opportunities in regional Australia, and better quality assurance via national frameworks for training qualifications and approval of training.

Notable industrial relations aspects are multiple workplace training, the 'wage top up' program for apprentices and trainees whose wages fall below specified levels, and 'approving authorities' to approve training falling under workplace or certified agreements.

Kilpatrick, S & Bell, R 1998, *Vocational education and training in rural and remote Australia*, NCVER, Adelaide.

Key: Official paper on training delivery (to special groups)

The authors survey issues and needs in rural and remote VET, particularly in the primary industries. They identify key issues for future research, including local planning involvement, concerns with 'thin' markets and user choice, (under)estimation of costs in VET resourcing models, the need for flexible delivery, and quality of assessment and assessors.

Kinsman, M 1998, 'Users, goals and user choice in vocational education and training', in *Different drums, one beat: Economic and social goals in education and training*, Monash University–ACER Centre for the Economics of Education and Training (CEET) and NCVER, Adelaide, pp.128–36.

Key: (Independent) paper on training system and training market

The Canberra Institute of Technology (CIT) official suggests that ANTA's goals are process rather than outcome driven and queries the highly detailed bureaucratic requirements for State and Territory training profiles. Sceptical of the user choice policy, she acknowledges that it might work in 'regulated entry-level training' where employer and trainee interests are more convergent.

'There seems little point', writes Kinsman of the training market, 'in increasing the number of providers if choice of content and outcomes remains so very limited'. She leans toward mixed (semi-competitive) models of VET funding, particularly those employing VET vouchers or entitlements.

Kirby, P (chair) 1985, *Report of the Committee of Inquiry into Labour Market Programs*, AGPS, Canberra.

Key: Report to government on employment policy and training policy

The 1999 NCVER review of apprenticeships takes this watershed report as its starting point. Against a background of sharply rising (youth) unemployment, the Commonwealth Government asked Kirby to assess training and work experience programs and recommend necessary improvements. The report's lasting influence is the recommendation for youth traineeships. In contemporary terms, key points are:

- the impact of youth issues and youth unemployment on the traineeship proposal
- the preference for employment programs with active assistance and training
- the traineeship's greater flexibility than apprenticeship, but deliberate similarity to an apprenticeship in its structural and industrial elements
- the failure, until 1996, to get at all close to the original 1985 target of 75 000 traineeships by 1988

KPMG Management Consulting, with Bob Marshman & Associates, 1998, *Impact of the growth of labour hire companies on the apprenticeship system*, ANTA, Brisbane.

Key: Report to government on supply and demand

This report examines the (adverse) impacts of labour hire on apprenticeship arrangements for those industries which employ apprentices in the traditional trades. It comprehends a multi-State survey of 200 labour hire firms, mainly metal, electrical and building, and several case studies.

The report notes the (proportional, not numerical) 1970–96 decline in apprenticeships relative to the total workforce, which it attributes to broader factors such as outsourcing, changing skill mixes in production, decline in suitability of recruits, and public sector downsizing. Suggested remedies focus on labour hire group training alliances, but also mention targeted incentives, industry levies, and tailoring apprenticeships for 'non-permanent' or multiple-placement working arrangements.

Lamb S, Long, M & Malley, J 1998, *Access and equity in vocational education and training: Results from longitudinal surveys of Australian youth*, ACER research monograph no.55, ACER Press, Melbourne.

Key: Academic report on training participation

This monograph uses the Australian Youth and Longitudinal Surveys to study access to VET across social and educational backgrounds. The authors begin with a reminder that 'VET in schools' is not a new idea, and summarise concerns that it not (as previously) be seen as a form of streaming for non-academic youth. Nonetheless, they find that taking VET in school is a strong indicator of not going on to university or further study. Post-school, they correlate apprenticeship take-up with lower socio-economic status, middle–low school achievement, and rural residence. Year 12 is now the 'common' point of entry for TAFE and apprenticeships.

Lewis, PET & Kosky, P 1998, *Youth employment, unemployment and school participation*, Discussion paper 98/3, Centre for Labour Market Research, Murdoch University, Perth.

Key: Academic paper on employment and training participation

This paper notes that (at June 1997) about 28% of Australia's 667 000 15–19 year old students combined full-time study with part-time work. It models school participation over 1970–95 by 15–19 year olds as a function of full-time employment, income support, part-time employment, junior wages, household income, and so on, finding that the first two factors are the most important determinants of participation. The authors note, *inter alia*, that total male apprentice numbers are fairly stable at 6–8% of the male 15–19 population. This calls into question the extent to which changes in apprenticeship availability and attractiveness are drivers for changes in school participation.

Lundberg, D 1998, 'Entry-level training', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, NCVER, Adelaide, pp.218–44.

Key: Academic paper on training trends and training delivery

The paper notes that post-1993 decline in Year 12 retention makes achievement of 'Finn' targets for 2001 unlikely and agrees with the view that VET opportunities for young people are low by Organisation for Economic Co-operation and Development (OECD) benchmarks.

The author surveys the role of brokers (group training, Student Traineeship Foundation, NETTFORCE) in developing AVTS and the cross-sectoral problems which have slowed progress. He summarises competency-based entry-level training as having been 'strongly policy driven rather than research driven' and notes continuing concerns with industry versus enterprise standards, graded assessment, and the limited realisation of key (Mayer) competencies in ELT.

Lundberg also touches on VET funding options (the loss of the Training Guarantee) and notes the disparity between school and post-school (ANTA) funding mechanisms for VET. He urges more research on the declines in Year 12 outcomes and apprenticeships, and the relationship between ELT and training wages and subsidies.

Malley, J 1996, 'Education, training and employment: Tectonic plates of doctrine, policy and change in a knowledge-based society', *Australian Economic Review*, 116.

Key: Academic paper on training policy

Malley examines the Commonwealth's key employment, education and training (EET) reviews of the period 1974–93. The constant themes are the need for labour force restructuring, the pivotal role of Commonwealth Government, the need for EET co-ordination and consolidation, and the EET needs of 15–19 year olds. The areas of movement are seen as:

- convergence of labour market, school-to-work transition and social welfare concerns
- the sustained rise in (youth) unemployment
- the increasing focus on micro reform of enterprise, industry or region
- the emergence of integrated EET policy frameworks in programs such as the AVTS
- greater deregulation

The author cites as emerging issues the part-time labour market in schools, the rise of private training enterprises, and the establishment of training wages.

Malley, J 1997, 'Entry-level training and New Apprenticeships: Delivery and funding options', in *Different drums, one beat: Economic and social goals in education and training*, Monash University–Centre for the Economics of Education and Training and NCVER, Adelaide, pp.227–39.

Key: Academic paper on training delivery

This paper describes alternative program delivery models for entry-level training and New Apprenticeships, which need to be considered if public funds for training are to be used efficiently and effectively. Four themes—the national VET debate, increasing cross-skilling in the trades, credentialism, and VET in schools—inform the models. The models, which portray ELT as

the 'first stage' of a possible two-stage New Apprenticeship, include institutionally-based, traineeships, school–TAFE partnerships, and school–TAFE partnerships with work placements.

In effect, some of these models appear to be emerging (Miles Morgan 1999) as practical pathways to trades and AQF 3 under the training packages.

Mansfield, B 1999, 'Meeting employee training requirements', in *Future training issues in Australia's industries*, a collection of the papers presented at the NCVER 1998 conference: Industry Training Outlook '98, Sydney, 12–13 October 1998, ed. P Curtin, NCVER, Adelaide, pp.15–23.

Key: Union paper on training system and delivery

The author agrees with the view of Australia as a moderate performer in the international VET stakes. He attributes the recent surge in traineeships to improved employer incentives, employer-union campaigning, and training marketing (NETTFORCE) in the early 1990s. He cautiously endorses VET in schools, provided this embraces proper contracts of training and other protections. He cautions against continuing complexity in the national VET system, suggesting that some States are 'double handling' or otherwise impeding endorsed training packages.

Marshman, R 1998, *Employment of apprentices: On the brink of crisis*, Bob Marshman and Associates, Melbourne.

Key: Independent paper on supply and demand, training in schools

This report highlights the downturn in employment of engineering apprentices, the lack of quality applicants for apprenticeships, and the poor perception of industry in the (Victorian) community. The main practical recommendation is for a network of engineering high schools offering basic vocational skills and paths to industry. The report proposes an urgent review of New Apprenticeships for their relevance to specific industries and incentives for employers to apprentice high achievers.

Mathers, R & Saunders, J 1995, *Review of the National Training Wage generic training packages*, an evaluation study conducted by the NCVER and the Department of Employment, Education and Training, Canberra.

Key: (Research) report to government on training delivery and industrial relations

This study evaluates the so-called National Training Wage (NTW) generic training packages which were mounted quickly by DEET and NETTFORCE to respond to the needs expressed in *Working nation* (Keating 1994). The NTW packages are found to be disliked by industry and training bodies but not employers. About half of 40 packages are recommended for continuation.

These NTW packages have been one prompter of post-1995 traineeship growth and may have influenced the contents of the current training packages.

McPhee, J, Shearer, S & Jayem Business Services 1997, *Report of consultations on possible extension of new apprenticeships and traineeships into schools*, VECCI, Melbourne.

Key: Industry paper on training in schools

This report considers the development of apprenticeships and traineeships in schools. Support for the concept is tempered by high uncertainty about what it might mean. The consultations suggest that success will depend on: industry support; contractual arrangements which provide appropriate protection, indemnity, and insurance for employers; payment only for productive work; and schools and training providers being responsive to enterprise requirements.

Miles Morgan Australia 1999, 'Alternative pathways to AQF 3 qualifications in trade occupations: A brief discussion paper', a national project managed by WA Department of Training and funded by ANTA (unpublished).

Key: Consultancy paper on (trade) training innovation and delivery

This discussion paper (a full report is to follow) discusses about a dozen case studies of 'alternative' or non-traditional pathways to AQF 3 in trade and related occupations. Significant experimentation is found, although not in large numbers. Pathways uncovered include school-based apprenticeships, traineeships within apprenticeships, primarily institutional pathways, AQF 2 followed by work experience, upgrading for existing workers, and so on. The triggers for these innovative approaches are supply and demand, structural change, regional training, access for new groups, high-skill needs, and new market opportunities.

The paper recognises that State legislation, award issues, limited access to VET funding or employer incentives, and quality concerns, can impede new pathways. These blockages can be overcome, especially by strategic alliances among employers, schools and training providers, ITABs, unions, and New Apprenticeship Centres.

Misko, J 1999, *Transition pathways: What happens to young people when they leave school*, prepared for DETYA, NCVER, Adelaide.

Key: Official paper on education and training participation, training innovation

The author summarises the main features of young people's pathways between 1996 and 1997. She notes the recent 5–6% fall in apparent retention to Year 12 (down to 72% in 1997), that 35–40% of Year 12s go on to university, almost a quarter of Year 11–12 completers go on to TAFE, only about 10% of students do VET-in-School programs, and the numbers of students entering apprenticeships have declined since 1989.

Misko notes that the proportion of 15–19 years in VET is stable around 20% between 1990–96, and attributes the fall in absolute numbers to changing population demographics. She observes the ageing of the apprenticeship and traineeship cohort and speculates on causes for the Year 12 retention drop (citing student preferences and perceptions, family and literacy factors) and suggests greater attention to, and incentives for, VET in schools, school-based apprenticeships and traineeships, especially those with group training companies.

Mitchell, R, Robertson, I & Shorten, A 1999, *Law and policy in vocational education and training: A contemporary survey*, NCVER, Adelaide.

Key: Official report on training system and regulation

The authors analyse current State and Territory VET laws in terms of their supportiveness of a national VET system. While the legislation is in a state of transition, it is found to be broadly consistent in content and purpose across jurisdictions, and thus supportive of VET policy. Chapter 5 discusses Commonwealth (VET funding and ANTA) Acts and the planning and regulatory purposes of State training authorities. Northern Territory, Tasmania and Victoria are said to have 'emergent' models with greater purchaser-provider separation and devolution in law. Some States also have 'TAFE divisions' in universities written into VET law.

It is noted that the legislation has not quite caught up with the training flexibility of New Apprenticeships yet, and all States except Victoria retain 'declared vocations'. State training legislation is held to prevail over State industrial relations (IR) legislation. Provisions for work placements in VET law are found to be patchy.

VET legislation, for example the contrast between the integrated AQF ladder and the divergent provisions for trades, traineeships and declared vocations, is sometimes cited as a major impediment to training innovation. Some States allow for vocational training 'schemes' or 'orders' in VET law, which afford a little more flexibility.

Moran, T 1998, 'Competitiveness is the key', in *The market for vocational education and training*, eds C Robinson and R Kenyon, NCVER, Adelaide, pp.175–85.

Key: (Official) paper on training system and market

This paper by the then ANTA chief executive officer argues that VET is a relatively large and diverse 'market' but does not act as a market. More than 'user choice' is needed to create a true market and demand-driven system. The VET sector must become competitive to support the highly competitive industry it services, facing domestic competition and competition in the global market place. TAFE must also respond to local demand yet still take advantage of opportunities globally.

Murphy, C 1998, 'Where the jobs are: The outlook for jobs', in *Future training issues in Australia's industries*, a collection of the papers presented at the NCVER 1998 conference: Industry Training Outlook '98, Sydney, 12–13 October 1998, ed. P Curtin, NCVER, Adelaide, pp.43–68.

Key: Independent (consultancy) paper on supply and demand, re funding issues

This industry paper attempts to characterise industries in terms of job *and* output (productivity) growth. The author notes that, over 1985–86 to 1997–98, 'output shares and job shares have moved in opposite directions in some industries'. High output-low job growth industries are: mining, wholesale, transport, finance and communications. In the converse are: construction; accommodation; retail; education; recreation; and personal services. Broadly similar patterns are forecast to 2000–2001, with education and retail slowing in job growth.

The interesting VET link is that recent shifts in ANTA resource allocation (see NCVER 1998b) appear to line up broadly with Murphy's *second* industry group.

Natarajan, L & Misson, E 1998, *Apprenticeships and traineeships: Victorian trends*, State Training Board of Victoria, Melbourne.

Key: Official paper on training trends

This report is a picture of apprenticeships and traineeships in Victoria just before the full introduction of New Apprenticeships in January 1998.

The authors note Victoria's recent break in the 'historically close correlation' between apprentices and workforce, down from a bit over 2% to 1.6%. Apprentices in training rose from 39 400 in 1980 to 50 400, then dropped to 30 400 in 1994 before recovering slightly, with recovery evident in building, metal, electrical and vehicle. Over 1989–96, the fall in commencements in manufacturing and construction was proportionately much higher than these industries' fall in employment.

Some credence is given to the outsourcing/labour hire theory in explaining the fall in apprenticeships, but there is also cautious support of the idea that traineeships may be substituting for apprenticeships in traditional apprenticeship industries. The authors note the role of NETTFORCE in boosting traineeships. Annual group training apprentice commencements doubled from 1990 to 1996, indicating a helpful role in keeping up the trades, but group training traineeship commencements increased tenfold. Some possibility is seen that training packages will increase the articulation from traineeships into trades.

On the supply side, TAFE has shifted its training profile away from trade certificates and into associate diplomas in response to falling demand.

National Board of Employment, Education and Training 1994, *The role of schools in the vocational preparation of Australia's secondary school students: Final report*, AGPS, Canberra.

Key: Report to government on education and training policy

The tenor of recommendations here is to improve and simplify linkages between the school and TAFE systems and their qualifications. Based on a discussion of pathways and funding resources, there is a series of recommendations for improved (automatic) articulation between school certificates and vocational qualifications (i.e. AQF 1 and 2), putting national vocational programs into schools, providing TAFE places for Year 12 students, and enabling school access to ANTA growth funds.

National Centre for Vocational Education Research 1997, *Employer satisfaction with vocational education and training 1997: National report*, NCVER, Adelaide.

Key: Official report on training quality, client satisfaction

This is a survey report on satisfaction among 2700 employers of recent TAFE (200 hours plus) graduates. Satisfaction is rated as 'generally high', with nearly 80% of employers rating VET at 6/10 or better. There are minor variations across States and industries. Among other findings are: (only) 50% awareness of RPL and CBT, nearly 80% having a desire for choice of providers, high ratings for the importance of teacher quality and graduates' work ethic and work capacity.

National Centre for Vocational Education Research 1998, *Australian apprentice and trainee statistics 1997–98*, NCVER, Adelaide.

Key: Official paper on training trends

The highlights of this report are that:

- about 195 000 individuals were in training (contracts) at 30 June 1998, perhaps 125 000–130 000 in 'apprenticeships' and the rest in 'traineeships' (see below)
- there were 123 000 training commencements in 1997–98, up 31% on the previous year (the figure for calendar year 1998 is even higher)
- over 50% of those commencing were 20 or older and over 30% were females
- over 90% of apprentices and trainees were employed in May 1998
- New Apprenticeships officially abolished the apprentice-trainee distinction from January 1998

The paper reckons on about 50 000 apprentice and trainee completions in 1997–98, as compared to about 120 000 graduations (200 hours plus courses) from TAFE in 1997. About 30% of TAFE graduates are found to have received RPL.

National Centre for Vocational Education Research 1998, *Industry training monograph: The overview*, NCVER, Adelaide.

Key: Official paper on training trends, supply and demand

This paper, and its subsidiary papers on specific industries, are significant in their efforts to render training supply more intelligible in terms of training demand, expressed in terms of industry and occupational growth and employer and trainee satisfaction.

'The directions in which (annual hours) resource allocations have moved', comments NCVER, 'towards areas such as business and clerical, community services, health and education, and tourism and hospitality—indicate that some key features of the changing labour market are finding an appropriate response from the VET systems'. The report also summarises results of recent NCVER surveys of employer and student satisfaction, pointing to areas for improvement (e.g. low satisfaction in certain industries like mining and transport, low student satisfaction with career and job information).

National Centre for Vocational Education Research 1998, *Research at a glance: Small business and vocational education and training*, NCVER, Adelaide.

Key: Official paper on training delivery and training culture

Recent employer research, this pamphlet suggests, points to small businesses being more likely to train in response to 'business problems' and preferring short training developed to meet their specific needs. VET has concentrated on generic management training and programs for start-up businesses, but these approaches have only reached about 25% of small businesses and not increased participation. Perhaps up to 50% of small business 'might or should' train, but this depends on the right marketing and products.

The pamphlet suggests that small business strongly prefers to use business networks for informal learning. Therefore, the marketing of small business training may do better if it tags along with and taps into these networks, selling business solutions rather than training per se. It is observed that there is little Australian research evaluating the impacts of small business training on the bottom line, on training attitudes and activity, and on improved performance.

National Centre for Vocational Education Research 1998, *Statistics 1998 at a glance*, NCVER, Adelaide.

Key: Official paper on training trends

This brochure on broad training market shares records that 75% (down from 78% in 1997) of 1.5m 1998 VET clients in vocational programs are with (about 100) TAFE and government providers, 15% are with community providers and 10% other providers. The TAFE-plus-government shares of enrolments, modules and hours range from 76% to as high as 86%.

The number of VET clients has grown from just under 1m (1989) to 1.1m (1994) and 1.5m (1998), with the number of female clients usually lagging about 50 000 behind the number of male clients. Of more than 1.5 million clients in public VET in 1998, NCVER counts about 750 000 enrolled for qualifications at or above the AQF Certificate III or equivalent, or 850 000 including Certificates II.

National Centre for Vocational Education Research 1998, *TAFE graduate destination survey 1998: National report*, NCVER, Adelaide.

Key: Official paper on training quality, client satisfaction

This paper results from a survey of all (55% of 121 000 responded) certificate and above TAFE graduates from 1997. In May 1998, about 73% (up from 71% in 1997) were employed, with figures of 80–90% in some courses. Nearly 80% of graduates achieved their main reason for doing the course. Nearly 70% rated the course at 8/10 or better overall—but this masks some areas of greater (teachers, venues and courses) and lesser (equipment and information) satisfaction.

The paper also gives detailed frequency counts of the 66 000 graduates responding by type of employment, type of qualification (p.182), and so on.

National Centre for Vocational Education Research 1999, *Australian apprentice and trainee statistics 1998*, vol.4, no.6, NCVER, Adelaide.

Key: Official paper on training trends

This report gives a recent picture of growth in training contracts and underlying occupational shifts. NCVER estimates about 134 000 training commencements for 1998 and 206 000 in training. 'Trades and related workers' have about 32% of total commencements and 61% of numbers in training. Females occupy about 46% of total commencements, although the percentage is much lower in traditional trades.

In the big five trade groups (mechanical, auto, electrical, construction, food) there has been little growth in training commencements over the past 2–3 years or longer. The intermediate clerical, sales and service group has about 32% of 'commencements' and 18% of 'in training', growing rapidly over the past 2–3 years. The elementary clerical, sales and service; and labourers and related groups have also grown quickly.

National Electrical Contractors Association 1998, *Barriers to the employment of apprentices in the electrical, electronic and communications industry*, Austech forum report, undertaken by NECA (Melbourne) for ANTA.

Key: Industry report on training delivery, supply and demand

The report sees a 'dramatic decline' in electrical and electronics apprenticeships since the late 1980s. Employers attribute this to increasing costs, poor community image, uncertainty of work and increased competition. The report recommends measures such as national promotion of apprenticeships, school programs promoting technical careers, simpler mature-age entry, and greater emphasis on 'basic management skills' in apprenticeships.

New South Wales Department of Education and Training 1998, 'Vocational education and training in New South Wales schools', *Training Agenda*, vol.6, no.1, pp.8–9.

Key: Official paper on training in schools

This article summarises policy changes, particularly since 1993, enabling VET in schools and the more recent school-based New Apprenticeship pilots. 'The 41 000 students undertaking dual-accredited (i.e. in the Higher School Certificate and by the Vocational Education and Training Accreditation Board) vocational courses in New South Wales', it notes, 'represent approximately 30% of all Year 11 and 12 students'.

Noble, C, Hill, D, Smith, E & Smith, A 1998, 'Policy challenges in the implementation of user choice in the Australian training market', paper presented to the NCVER Seventh Annual VET Researchers Conference, 14–17 July, Charles Sturt University, Wagga Wagga.

Key: Academic paper on training market and delivery

This paper summarises the development of the present ANTA concept of user choice (flow of funds to provider reflecting choice by client) and suggests that user choice will develop most quickly in more established markets where employers and providers are 'engaged' or able and willing to change arrangements (e.g. hospitality versus engineering). This theory could be compared to actual results and the actual patterns of State 'user choice' funds.

Noble, C, Hill, D, Smith, E & Smith, A 1999, 'Policy issues in the implementation of user choice in the Australian training market', *Journal of Vocational Education and Training*, vol.51, no.1, pp.5–22.

Key: Academic paper on training market and training delivery

This paper summarises the development of the training market and ANTA's concept of user choice, again (Noble et al. 1998) suggesting that user choice will develop quickly in more established training markets. New South Wales employers and training organisations are sampled for information on markets at risk of poor provision under the user choice model.

The sampling suggests that user choice may have an adverse impact on training for equity groups and in rural areas with long commuting distances to VET providers. In apprenticeships and traineeships, perceived dangers of user choice are over-customisation of training by employers, and trainees having lesser powers than employers to exercise choice. The authors caution against

the assumption that user choice will only impact at the margin and counsel governments to plan carefully to minimise risks of failure in thin markets.

Norris, K, Dockery, AM & Stromback, P 1997, *The social return to apprenticeship training*, Discussion paper 97/6, Centre for Labour Market Research, Murdoch University, Perth.

Key: Academic paper on training costs

The authors can find few Australian studies of apprentice training costs. Drawing on the survey in Dockery et al. (1997), they conclude that the distribution of apprentice training costs (53% to firm, 28% to the public sector and 19% to apprentice) is at odds with economic theory. Male apprenticeship is estimated to have a social rate of return near 13%.

The authors note that recent policy changes are designed to shift costs more toward the apprentice. 'If employers' willingness to offer apprenticeships has been a constraint, then these changes should stimulate training', they conclude. 'However, there is a danger that such reforms may undermine a system which has been quite successful'.

Office of the ACT Administration 1987, *The development of employment and training responsibilities in the ACT: A community discussion paper*, AGPS, Canberra.

Key: Official paper on training system and regulation

Responding to shifts in the Australian Capital Territory governance and employment, and *ad hoc* administrative arrangements for the new traineeship system, this paper notes that all other States and Territories have revamped their training legislation to accommodate traineeships and urges a similar refit of the Australian Capital Territory's traditional Apprenticeship Board. A new training authority for the Australian Capital Territory was established soon after. A point of contemporary relevance is that (comparing supply and demand) the Australian Capital Territory's vocational training effort is found to be over-geared for the professions compared to the trades.

Office of Training and Further Education 1997, *Outcomes from vocational education and training for employers and participants*, OTFE, Melbourne.

Key: Official paper on training delivery and quality

This paper summarises a survey and face-to-face exercise on VET outcomes, for a mixed sample of Victorian employers and training participants. Employers sampled are keen on: fewer attempts to sell 'ready-made' TAFE courses; greater enterprise involvement; more recognition of the value of on-the-job training; the use of industry premises; and sharper small business focus.

Valued principles for small business training delivery include on-the-job delivery, short off-the-job bursts, timing to suit the employer, enterprise relevance, and individual learning support. Participants look for more work experience, hands on training, and real work examples in formal training.

Office of Training and Further Education 1998, *Benefits to employers from an investment in training: Literature review*, OTFE, Melbourne.

Key: Official paper on training costs and benefits

This paper reviews the (human capital) theories and findings on training costs and benefits. Recent international studies around Europe, United States of America and Japan point to a strongly positive link between (structured) training and productivity growth in manufacturing and other industries. Training can also assist in adoption of new workplace practices (as backed up by Australian studies) and retention of skilled workers.

Australian employers, the report notes, devote 70% of their training expenditure to specific in-house training, consistent with human capital theory. The paradox of high European firm investment in 'general' VET is better explained in cultural terms of strong internal labour markets and low turnover, rather than in terms of the recognition frameworks (which Australia also has). Arguably, general training may be the best focus for Australian VET funding, although 'this is the reverse of some arrangements under training packages, where government funds training aimed at specific industry-based competencies'.

'In training the existing workforce', the report argues, 'the potential of government to fund training is dwarfed by the benefits of increased employer investment'. Existing employer expenditure on training (ABS figures 1997 [*Employer training expenditure in Australia: July to September 1996*, Cat.No. 6353.0]), if only rising slowly, is greater than government's by about $5bn to $4bn. Governments may be best placed in VET investments that lead on to greater private investments—useful measures may be promotion of training, brokering for small business, flexibility in training delivery. International studies suggest that initial vocational training works more effectively with employer involvement, while (some) subsidies may be necessary to encourage low-training industries into training existing workers.

'The evidence overwhelmingly shows', the report concludes, 'that appropriate training can be successful in achieving a range of business objectives. This provides a foundation for promoting training to employers'.

Pickersgill, R & Walsh, M 1998, 'The experience of training reform in Australia', paper presented to the NCVER Seventh Annual VET Researchers Conference, Charles Sturt University, Wagga Wagga,

Key: Academic paper on training policy and impact on (apprenticeship) training, supply and demand

This paper puts a different slant on the training reform agenda. The authors argue that employer awareness of the system is low and employers are unlikely sources of training innovation (e.g. in the New South Wales AVTS pilots). 'In internatio• al terms', the authors argue, 'the Australian figure of apprenticeship training is high' (2% of .ıe labour force or 10% of manufacturing employees in an apprenticeship). Comparing Australia to other developed nations, this is attributed to: the relevance of apprenticeships to our small firms, the continuing involvement of the State, the role of awards, and the (surprising) amount of multi-skilling required to cope with the 'repair-oriented' nature of Australian industry.

Regional Economic Research Unit (RERU) and Group for Research in Employment and Training (GREAT) (Charles Sturt University) and Western Institute of TAFE 1998, *An economic evaluation of alternative methods of delivering employer provided electrical trade and mechanical engineering trade apprenticeship training*, NCVER, Adelaide.

Key: Academic paper on training costs and training delivery

This activity-based study of training costs begins with a survey of apprentice training delivery and costs, which queries the focus on 'high' apprentice wages and suggests that employers train for social and community reasons despite high costs. The authors find that the (Lithgow) Apprentice Training School option is dearer than first-year on-the-job training, but that the Training School apprentices may be better and cheaper in later years. The estimates of high net costs to employers are roughly comparable to those of Dockery et al. (1997), but somewhat higher (especially in electrical, $66 000) because the expected fall-off in costs is not found in the later years of apprenticeships.

Robinson, C 1998, 'An overview of Australian vocational education and training research', in *VET research: Influencing policy and practice*, eds J McIntyre and M Barrett, Australian Vocational Education and Training Research Organisation, Sydney, pp.12–22.

Key: Official paper on training research, training system, training costs and delivery

This paper examines Australian VET research of the 1990s. The author asserts that the future challenge for VET research lies in quality rather than the quantity. He selects 11 areas for comment:

- learning in the workplace - effectiveness, cost and recognition of prior learning
- returns to enterprises from investment in VET
- perceived barriers preventing small businesses investing in training
- training markets
- entry-level training—limited research on apprenticeships and traineeships
- vocational education in schools—difficulties in (re)introducing VET
- public and private training provision—need for more research and statistical evidence
- flexible delivery of training, including the paucity of work on lifelong learning
- assessor training—Competency Standards Body concerns and concerns with assessor competency and the effectiveness of training
- different models for quality assurance
- evaluation

Robinson, C 1998, 'The VET product and the development of the training market', in *The market for vocational education and training*, eds C Robinson and P Kenyon, NCVER, Adelaide, pp.102–24.

Key: Official paper on training market, client satisfaction and preferences

The author notes that, although now having about 1000 providers of publicly funded VET programs, Australian VET does not meet the economic criteria for competitive markets. It is 'not established', he argues, that this is necessary or desirable for developing a more responsive and competitive VET sector.

He describes the complex array of products (qualifications) available under the AQF and classifies old system, AQF, and non-award, enrolments as at 1996. There are over 500 000 enrolments in Trade Certificates or higher (under the old system) and Certificates III and higher (new system), which would presumably include the 160 000 apprentices and trainees in training that year.

Data from the 1996 Employer Satisfaction Survey (ESS) suggests fairly high levels (about 70% on various indicators) of satisfaction with the 'product' but a desire for more design and delivery flexibility.

Drawing on ESS and other social research sources, Robinson suggests that the right Australian VET 'market' emphasis for the future is better information and more diverse products rather than the commodity-markets approach of multiplying the sellers of standardised products. Useful steps would be to simplify the AQF qualifications and names and the New Apprenticeship brand names.

Robinson, C 1999, 'Promoting a training culture in industry', in *Lifelong learning: Promoting a training culture*, eds C Robinson and K Arthy, NCVER, Adelaide, pp.1–22.

Key: Official paper on training innovation and incentives

The paper notes the training culture emphasis in the current ANTA national strategy, but suggests that Australia has more of a training culture than is thought, pointing to 12% of the working age population taking a VET course in 1997. Recent (1996–97) ABS surveys suggest that private expenditure on structured training exceeds public expenditure. Nearly all large employers (20+) provide structured or unstructured training, as do more than half of small (-20) employers but not many micro (1–4) employers. *Structured* training is only provided by a minority of firms, is usually done in-house, and varies widely across industries.

The author notes that, on a variety of measures, small (-20) employers seem to have wound back their training effort as measured by ABS over 1990–93–96. He argues that the 1990s Training Guarantee levy was not an effective instrument to promote training culture, having little impact on very big and very small firms. He points to the voluntary United Kingdom Investors in People scheme for endorsing 'good training' firms, and the University for Industry, which will promote lifelong learning, broker learning products and services, and franchise new learning centres.

Robinson, C 1999, 'The development of traineeships and the impact of research', in *The impact of R&D on VET decision making: A range of case studies*, ed. C Selby Smith, NCVER, Adelaide.

Key: Official paper on training research and training trends

The author, an official with the 1984 Kirby Inquiry (Kirby 1985), argues that Kirby's traineeship recommendations were underpinned by an unusually sustained and deliberate research effort. Reviewing numerical trends in apprenticeships and traineeships, Robinson acknowledges that systemic friction and difficult labour markets may have held traineeships back in the 1980s and early 1990s, while agreeing with Wooden (1998b) that the impact of young people's changing preferences has been underrated.

The author notes the shift of training to older age groups and the proportional decline of trade-related (metal, electrical, building) training since 1985 compared to growth in sales, clerical. He decries the 'comparatively little research over the 15 years since the inception of traineeships'.

Rural Training Council of Australia (RTCA) 1999, *National rural and related industries strategic plan 1999–2000 for vocational education and training*, RTCA, Kingston ACT.

Key: Industry report on training policy and delivery

Against the background of rural economic, market, environmental, and supply-side trends, this paper sets four focus areas for RTCA's activities—skills development, skills supply, marketing training reform, and RTCA organisation.

Some of the significant objectives and initiatives are: increasing the (industry image and) number of high calibre entrants; raising industry awareness of the training package options; encouraging industry to train for increased productivity; marketing training reform and the rural training package to training providers, group training, industry associations and enterprises; and taking action on impediments to training package implementation such as inappropriate awards, negative attitudes, assessment concerns, lack of non-endorsed (learning guide) material, and lack of casual traineeship arrangements.

Schofield, K 1999, *Independent investigation into the quality of training in Queensland's traineeship system*, Department of Employment, Training and Industrial Relations, Brisbane.

Key: Report to government on quality assurance and training regulation

The author, a member of the 1984 Kirby Committee (Kirby 1985), was asked to investigate the quality and effectiveness of Queensland traineeships, particularly when delivered fully on-the-job. Her report notes the evolution of the original Australian Traineeship System through Career Start Traineeships to AVTS and ultimately New Apprenticeships. It employs tests of VET quality (effectiveness, fitness for purpose, efficiency and accountability) derived as much from the Productivity Commission's work on Commonwealth–State Service Provision as from the analogous ANTA measures.

The author expresses concern at the dual training and employment objectives of traineeships, the drift of traineeships to older age groups, common breaches of user choice and ARF requirements, actual service (i.e. training delivery) failures, high costs and low completion rates, and insufficient bureaucratic accountability. She notes separate Department of Employment, Training and

Industrial Relations (DETIR) work examining the multiple steps in traineeship processing and administration. She incorporates an employer and trainee survey which finds reasonable (75–80%) levels of satisfaction with RTOs, although employers are less satisfied if they have to deliver courses or they are mailed out.

The problems are linked to multiple training system changes, blurred policy objectives, neglect of learner needs, poor quality assurance, Queensland's rapid 'all comers' implementation of user choice, and distortion of training incentives. Recommendations include: a primary traineeship purpose of training young people; better administration and performance management; upskilling of training auditors; brakes on delegation of recognition and user choice implementation; and disincentives to fully on-the-job traineeships.

Segal, L & Johnson, B 1987, *Standards-based trade training—a discussion paper*, Department of Employment, Education and Training, Canberra.

Key: Report to government on training system

This paper, prompted by the Kirby Inquiry and commissioned by the then National Training Council, debates the pros and cons of standards-based rather than time-based trade training. The pros are couched in terms of greater flexibility for employers and apprentices to respond to supply and demand. The cons—industrial difficulties of moving away from a time-based model—remain relevant although training packages now cover most trades and their underlying competencies.

Selby Smith, J, Selby Smith, C & Ferrier, F 1996, *Key policy issues in the implementation of user choice*, Working paper no.8, Monash–ACER Centre for the Economics of Education and Training, Melbourne.

Key: Academic paper on training system and training market

Funded by ANTA and based on consultations with States and peak bodies, this report identifies key issues for 'user choice' in training. These include reviewing the distribution of training costs, examining user choice in small business and in schools, improving access and equity, improving information, 'third party' (i.e. alternative provider) access to providers, more work on costing and pricing, and the possibilities of 'cost shifting'.

Senate Employment, Education and Training References Committee 1995, *Report of the inquiry into the Australian National Training Authority*, Parliament of Australia, Canberra.

Key: Government report on training system and training funding

The committee was asked to examine the operation and effectiveness of the ANTA agreements with States and Territories. The tenor of recommendations is toward greater performance orientation in VET funding and better data for performance measurement of outcomes, plus a more transparent, inclusive and consultative process of developing State training profiles. For example, it is urged that schools be included more in consultations and in the funding.

Large States are portrayed as beneficiaries of ANTA's (20%) growth funding and smaller States portrayed as concerned with ANTA's micro-management bureaucratic requirements. The report is critical of ANTA's apparent failure to develop 'suitable outcome measures'.

Sloan, J 1994, *The market for training in Australia*, Working paper no.131, National Institute of Labour Studies, Flinders University of SA, Adelaide.

Key: Academic paper on training market and training system

The paper summarises the economic theories that training costs (optimally) are shared between firms and workers in proportion to the respective benefits accrued. Market failures are seen to arise from high worker turnover, 'poaching', poor market information, externalities arising when firms cannot capture benefits of technological investments, effects of wage regulation, and so on.

The author surveys mixed evidence that Australia is a 'low training' country and cautions against assumptions that increasing national (as opposed to enterprise-level) investment in training will deliver increased productivity. She criticises the national training reform agenda as centralised and lacking 'appreciation of why training markets fail and how imperfections can be remedied'. Also raised is the impact of underpriced tertiary education on VET investment.

Smith, A 1999, 'The elements of a training culture', in *Lifelong learning: Developing a training culture*, eds C Robinson and K Arthy, NCVER, Adelaide, pp.73–80.

Key: Academic paper on training culture and industrial relations

Like a number of authors, Smith points to the apparent (slight) decline between 1990 and 1996 in the percentage of company payrolls being devoted to training. Recent case studies gainsay these ABS statistics. These studies and OECD parallels point to five elements of a training culture at the enterprise level:

- training should link to the business strategy, as when export strategies demand quality reforms which drive training reforms
- technological, or rather workplace, innovations and reforms can trigger new training needs
- participative rather than adversarial employee relations create the climate for training
- a genuine management commitment to training in the face of short-term profit demands is a notable part of the true training culture
- some industries have longstanding traditions of skill training or training for technical excellence, which lend themselves to the training culture

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Smith, E, Hill, D, Smith, A, Perry, P, Roberts, P & Bush, T 1996, *The availability of competency-based training in TAFE and non-TAFE settings in 1994*, research commissioned by DEET, AGPS, Canberra.

Key: Report to government on training delivery

The report notes that the VET ministers' target of 'substantial implementation of CBT by the end of 1993' has not been achieved. There are wide variations across TAFE systems (SA highest achievement, New South Wales lowest) and non-TAFE providers have adopted CBT faster than TAFE. 'Certain features of CBT', note the authors, 'such as self-paced learning and workplace assessment have not been adopted to any significant extent'.

This study underlines difficulties with the then National Training Board (NTB) approach to CBT. With the advent of training packages since 1998, there may have been some improvements, such as greater implementation of workplace assessment.

Smith, L 1998, *Apprenticeships and traineeships: Queensland trends*, Department of Employment, Training and Industrial Relations, Brisbane.

Key: Official paper on (apprenticeship and traineeship) training trends, supply and demand, and quality assurance

In accessible terms, this paper summarises key Queensland entry-level training trends over 1989–96 (or in some cases 1989–98) and draws out policy implications.

A decreasing proportion of the workforce is in the trades. However, Queensland has maintained apprentices in training numerically and as a proportion of the workforce. Underneath this aggregate finding, there are some deteriorations in the proportion of apprentices to total tradespersons (metals, electrical, printing) and improvements (construction, auto, food and horticulture). Apprenticeship starts have dropped since 1995, while Queensland has hugely increased trainees in training (from 3000 to 27 000 over 1995–98).

The author suggests that, if the Queensland economy may now need less trades, we may need to 'change our thinking' on the nature of apprenticeships. The high industry variability on nearly all indicators suggests that training issues need to be approached industry by industry. Low completion rates suggest poor learning (as opposed to CBT) support from VET teachers. The high proportion of age 25+ apprentices and trainees is bluntly described as 'not reflective of government training policies'.

Smith, L 1999, *Impact of user choice on the Queensland training market: A progress evaluation*, Department of Employment, Training and Industrial Relations, Brisbane.

Key: official paper on training market and quality assurance

Despite strong industry support, this report contends that both the training and the outcomes of training under the user-choice system in Queensland are of highly variable quality, particularly where full on-the-job arrangements are in place. The report summarises market shares among providers, user perceptions of user choice, and recommendations for improvements.

State Training Board of Victoria 1989, *Reform of the apprenticeship system: A discussion paper*, State Training Board, Melbourne.

Key: Official paper on training system

This report notes contemporary problems with trade training—insufficient numbers, time-served approach, lack of provision for reskilling and for special groups, narrow occupational approach, and focus on process rather than quality. It concentrates on five reform issues (1) apprenticeship and the supply of tradespersons; (2) supply of applicants for apprenticeship; (3) wastage during and on completion of apprenticeship; (4) competency-based apprenticeship training; and (5) access to apprenticeship. The paper proposes that the State Training Board approve reform policies and actions to deal with each issue.

Steering Committee for the Review of Commonwealth/State Service Provision 1998, *Report on government services*, vol.1, Industry (now Productivity) Commission, Melbourne.

Key: Official report on VET performance and quality assurance

Chapter 1 of this annual report, which springs from a 1993 Council of Australian Governments decision, describes the committee's approach to performance measurement in terms of outcomes, access and equity, appropriateness, quality and efficiency. Chapter 4 deals with VET and the outcomes of $3.3bn government expenditure (half of total training expenditure in the economy) in 1996.

The report notes that the 4% growth in funds in 1996 roughly matches the 3.8% growth in student numbers. The share of funds open to user choice or competitive tendering varies from 4.5% in the Australian Capital Territory to 11.6% in Queensland. The report considers State-by-State levels of VET participation by designated equity groups and summarises results of the 1997 employer satisfaction and graduate destination surveys. It is noted that males and females aged 15–64 have about equal shares of VET participation, although males still outweigh females in the 15–24 age bracket.

For outcomes, it is noted that the average 1996 'module load completion rate' is 85%, the Australian Capital Territory being below average and South Australia and Western Australia well above. Government recurrent expenditure per hour of module load completions is about $13, the Australian Capital Territory being $17 and Victoria and Queensland $11.

Steering Committee for the Review of Commonwealth/State Service Provision 1999, *Report on government services 1999*, vol.1, Productivity Commission, Melbourne.

Key: Official report on VET performance and quality assurance

Chapter 3 of this report notes continuing shortfalls in certain trade skills provided through the VET system. It generally deals with VET and the outcomes of $3.6bn government VET expenditure (45% of total training expenditure in the economy) in 1997.

The report defines effectiveness indicators in terms of national (skill) outcomes, employer and student outcomes, access and equity. Efficiency is defined in terms of recurrent and capital cost indicators. National skill outputs (and gaps) are held to be an area of deficits in measurement, although ANTA work on this is acknowledged.

The report notes that the share of funds open to user choice or competitive tendering has grown since 1996, varying from about 4% in the Australian Capital Territory to 15% in Queensland and 22% in Victoria.

The report considers State-by-State levels of VET participation by designated equity groups and summarises results of the 1997 employer satisfaction and 1998 graduate destination surveys. The national VET participation rate among 15–64s is 10% in 1997. It is noted that male participants still outnumber females in the 15–24 age bracket. For outcomes, it is noted that the average 1997 'module load completion rate' is 83%, South Australia and Western Australia being well above. Government recurrent expenditure per hour of module load completions is about $17 (up from $13 nominal, or $15 real, in 1996), the Australian Capital Territory and Tasmania being about $22 and Victoria $13.

New measures in this report are government cost of capital per annual curriculum hour (ranging from $1.60 in Western Australia, New South Wales and Victoria to $2.70 in the Australian Capital Territory) and cost of capital per module load completion. In all, there are 29 comparative tables.

Sweet, R 1995, 'The naked emperor: Training reform, initial vocational preparation and youth wages', *Australian Economic Review*, 110, pp.101–108.

Key: Independent paper on training participation and training trends

The author cautions that nations with low or declining public investment in vocational training (e.g. USA) are at a disadvantage. He finds that in 1985 only one-fifth of all Australian education and training places available to those of upper secondary age were in the VET sector (apprenticeships and traineeships, TAFE and private colleges), compared to one-half as the OECD average. Little is seen to have improved by 1995, before the recent major surge in traineeship numbers. Inflexible training wage mechanisms and structures, particularly for traineeships, are cited as a major problem.

Sweet, R 1996, 'How well do our entry-level training models fit the labour market of the 1990s', in *Rethinking work: Re-inventing education*, Tasmanian Education Consortium, Hobart .

Key: Independent paper on training participation and training trends

This paper expresses concern that only one in four young Australians take part, in the immediate post-compulsory years, in recognised vocational preparation programs, compared to an average of one in two in OECD countries. The number of apprentices and trainees is said to be a record low (at June 1995) as a percentage of total employment. Sweet posits that rapid growth in part-time employment is working against the continuity of full-time employment required for apprenticeships and traineeships.

Taylor, R 1996, *Report of the Review of the ANTA Agreement*, AGPS, Canberra.

Key: Report to government on the training system and training funding

This is the first major review of the ANTA Agreement following the establishment of the Australian National Training Authority in December 1992.

The report finds that progress under the agreement is satisfactory overall, with reasonable progress towards the 'Finn' targets and fair evidence that increased VET funding has led to increased performance. However, the review strongly recommends: clearer management, rationalisation of VET funding mechanisms (reconsideration of the role of growth funds and of 'maintenance of effort'), the improvement of data and performance measures, better resource allocation (competition policy) and improved market regulation (a purchaser-provider split, putting TAFE on a commercial footing), and a simpler devolved system for national recognition.

VandenHeuvel, A & Wooden, M 1999, *Casualisation and outsourcing: Trends and implications for work-related training*, NCVER, Adelaide.

Key: Academic paper on training trends and training delivery

This study seeks to describe trends toward casual and outsourced labour and the implications for work-based training.

Casual employment (as defined by nil leave entitlements) has increased its share of wage and salary earners over 1984–98, now covering more than 25% of wage and salary earners (or rather less, according to other ABS estimates). Casuals are more likely to be young, female and part-time. Outsourcing is harder to pin down but may cover from 5% to 10% of workers, being practised most by large organisations in certain industries (government, communications, transport).

In accord with human capital theory, analysis of recent ABS surveys suggests that permanents are about twice as likely (40% vs 15%) as casuals to have received in-house training in the previous year of employment. The report acknowledges recent concerns with labour hire firms, but 'no evidence is found that the use of contractors is related to a decline in the level of training activity for employers'.

It is found that casual employees are much less likely than permanents to undertake formal training, although to some extent this is offset by participation in external training out of work hours. Further research is suggested on casual employer and employee training attitudes and preferences.

Ward, C 1995, 'Update on the Australian Vocational Training System' in *AVTS (Australian Vocational Training System) News*, no.1, pp.2–3

Key: Paper on training system and delivery

The Australian Vocational Training System, the paper notes, is intended for a system of multiple pathways from school to work. The author provides an update on the AVTS and answers for these questions:

(1) Where are we now in achieving the AVTS vision?

(2) What is the scope of the AVTS?

(3) What has emerged from the AVTS pilots?

(4) How do we convert existing apprenticeships and traineeships to AVTS?

Western Australian Department of Training 1996, *Developing the training market*, an ANTA national project managed by WADT, ANTA, Brisbane.

Key: Official report on the training system and market

'There is emerging consensus', this ANTA report summarises, 'that substantial VET delivery could be funded through competitive tendering processes'.

The report summarises State and Territory approaches of the time and identifies a number of good practices in VET tendering—e.g. direct competition between public and private, open and simple processes, repeat business and preferred provider mechanisms, and quality guarantees.

Stakeholder concerns include cost shifting from private to public, access and equity, the level playing field and costs of tendering. There is a particular emphasis on resolving problems with competitive tendering in rural markets and problems with the lack of information for clients to make informed choices.

Western Australian Department of Training 1997, *New Apprenticeships: Making it work*, Western Australian Department of Training, Perth.

Key: Official paper on training policy and training system

This report, made just before the Australian Recognition Framework took effect, serves to inform State and national initiatives to expand employment-based training. It draws on workshops, focus groups and over 500 interviews with employers, apprentices and trainees. Key findings relate to:

- the drift of training to over-21s and the predominance of males in apprenticeships
- employers' 'altruistic' and business motives in training
- apprentices' and trainees' motives for training
- levels of satisfaction with the system, including concerns with schools, regulation, and assessment

The policy recommendations relate to merging apprenticeships and traineeships, expanding employment-based training, monitoring youth participation and improving recognition of prior learning for adults, and improving support and monitoring (especially regarding graded assessment).

Wilson, J & Lilly, M 1996, *Recognition of prior learning*, NCVER, Adelaide.

Key: Official paper on training delivery

This is a report on the first five years' experience with RPL in the Australian training system and context. 'RPL and recognition are important elements of training reform', the report concludes. Issues that need to be clarified are terminology, the relation between assumed and actual benefits, variable practices, variable costs and charges. 1994 ABS data shows about 17 000 of 64 000 TAFE graduates receiving some form of recognition of learning or skill, but the bulk of the recognition (10 000 cases) is for prior *TAFE* study.

Wooden, M 1998, 'Employer perceptions of ITABs: Survey evidence', in *Different drums, one beat: Economic and social goals in education and training*, Monash University–Centre for the Economics of Education and Training and NCVER, Adelaide, pp.208–18.

Key: Academic paper on training system and delivery

This five-industry survey finds about 40% employer awareness of ITABs, with high variation across industry. A sizeable minority of employers still expect ITABs to be direct training deliverers. The author's research leads him to suggest that the ITABs should be refocussed on advising industry and employers rather than government.

Wooden, M 1998, 'The labour market for young Australians', in *Australia's youth: Reality and risk*, Dusseldorp Skills Forum, Sydney, pp.29–50.

Key: Academic paper on training participation and training trends

This article demonstrates that, although the proportion of teenagers in employment has been fairly stable over the past 15 years, the majority of that employment is now part-time. Over 275 000 of the teenagers now in part-time employment are also students, as compared to less than 80 000 teenagers in apprenticeships or traineeships.

The policy implication is that teenagers may be preferring and finding informal work-and-study options at a faster rate than they are taking up formal training options.